THAT WHICH IS CLAIMED IS:

1. A method of operating a solid state image sensor having an image sensing array comprising a plurality of active pixels, the method comprising:

resetting each said pixel;

after a first predetermined period of time reading a first output from each said pixel so as to obtain a first set of image data having a first dynamic range;

without resetting said pixels, after a second predetermined period of time reading a second output from each said pixel so as to obtain a second set of image data having a second dynamic range; and

combining said first and second sets of image data in order to obtain a resultant set of image data having a further dynamic range different from said first and second dynamic ranges.

2. A method as claimed in Claim 1, further comprising, without resetting said pixels, after at least a third predetermined period of time reading at least a third output from each said pixel so as to obtain a third set of image data having a third dynamic range; and

combining at least said first, second and third sets of image data in order to obtain a resultant set of image data having a further dynamic range different from said first, second and third dynamic ranges.

3. A method of operating a solid state image sensor having an image sensing array comprising a

plurality of active pixels, the method comprising:

resetting and immediately reading a preliminary output from each said pixel;

after a first predetermined period of time, reading a first output from each said pixel.

4. A method as claimed in Claim 3, further including the step of determining the difference between said preliminary and first outputs so as to obtain a set of image data substantially free of noise components represented by said preliminary outputs.

5. A method as claimed in Claim 1 or Claim 2, in combination with a method as claimed in Claim 3 or Claim 4, wherein said preliminary outputs of Claim 3 or Claim 4 are read immediately after performing the resetting step of Claim 1 or Claim 2.

6. A method as claimed in Claim 5, further including the step of determining the difference between said preliminary outputs and each of said first, second and any subsequent outputs so as to obtain a plurality of said sets of image data each of which is substantially free of noise components represented by said preliminary outputs.

7. A method as claimed in any preceding Claim, wherein the or each said predetermined time period is selected to be an integer multiple of a predetermined lighting flicker period.

8. A method as claimed in any preceding Claim, wherein said image sensing array remains

continuously exposed to incident light while the method is performed.

9. A solid state image sensor adapted to perform a method as claimed in any one of Claims 1 to 8.

10. A solid state image sensor system adapted to perform a method as claimed in any one of Claims 1 to 8.

11. A camera incorporating a solid state image sensor or image sensor system adapted to perform a method as claimed in any one of Claims 1 to 8.